Crash Helmet Design
A Safety Product PBL for AEC Physics

In this authentic project, students will design, prototype and test a crash helmet with a purpose of protecting a population of people from traumatic head (brain) injury. Students will employ the design thinking process, start-to-finish, and use an egg to simulate a human head.

Brainstorm Ideas Addressing Problem Statement

Task: View the Ideate video to help spark ideas and explore methods for brainstorming your egg crash protective device. Remember to say, "YES, and…" to support creativity and divergent thinking. As a team, create a simple document showing a variety of concepts you have generated as you "flare" in your ideation.

Work Product: Using any presentation method, work as a team to create an Ideation Flare document, output as a PNG or PDF, showing your design collection of ideas for the egg crash protective device.

Scoring: The team-generated Ideation Flare document should consist of:

- Title and team member names (5 pts)
- *Eight or more* concepts for a **user-centric device** to protect the egg head during a crash – specifically a fall. (40 pts) Concepts may be presented in any visual (print layout) method your team chooses:
    - Photo images from the web, accompanied by captions
    - Sketches with descriptions
    - Post-it note collage, organized by themes, and photographed
    - Word concept map
- Proper spelling and grammar; layout is readable/logical/understandable (5 pts)

Submit: Create and share your file with your instructor via Google Drive and send the shared link via Edsby.